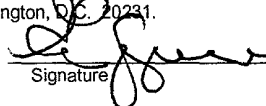


## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	§	Serial No:	To Be Assigned
Richard E. Smalley et al.	§		(division of application
	§		Serial No. 09/380,545)
For: CARBON FIBERS FORMED FROM	§		
SINGLE-WALL CARBON	§	Filed: CONCURRENTLY HEREWITH	
NANOTUBES	§		
	§	Group Art Unit: 1754 (anticipated)	
	§		
Atty Dkt: 11321-P012USD4	§	Prior Examiner: Stuart Henderson	
	§	703.308.2539	

U.S. Patent and Trademark Office  
BOX: PATENT APPLICATION  
Washington, D.C. 20231

"EXPRESS MAIL" MAILING LABEL	
Number. <u>EL 823 269 733 US</u>	
Pursuant to 37 C.F.R. § 1.10, I hereby certify that I am personally depositing this paper or fee with the United States Postal Service "Express Mail Post Office to Addressee" service on the date indicated above in a sealed envelope (a) having the above-numbered Express Mail label and sufficient postage affixed, and (b) addressed to the U.S. Patent and Trademark Office, Box: Patent Application, Washington, D.C. 20231.	
<u>December 28, 2001</u>	<u></u>
Date	Signature
	<u>Gracie Segovia</u>
	Printed Name

**PRELIMINARY AMENDMENT ACCOMPANYING REQUEST FOR FILING  
DIVISIONAL APPLICATION UNDER 37 C.F.R. § 1.53(b)**

Sir:

This paper accompanies a Request for Filing Divisional Application Under 37 C.F.R. § 1.53(b) and associated filing fee therefor ("the Request"). If the fee payment is missing or insufficient in amount, or if any other fees are determined to be due, the Assistant Commissioner, Commissioner, and/or the Director of the U.S. Patent & Trademark Office is/are hereby authorized to charge any such fees (or credit any overpayment) to Winstead Sechrest & Minick Deposit Account No. 23-2426, referencing matter number 11321-P012USD4.

IN RE: APPLICATION OF SMALLEY ET AL.  
PRELIMINARY AMENDMENT ACCOMPANYING REQUEST FOR FILING DIVISIONAL APPLICATION UNDER  
37 C.F.R. § 1.53(b)

## AMENDMENTS

### In the Title

Please amend the title by replacing the present title with the following:

--METHOD FOR FORMING A PATTERNED ARRAY OF SINGLE-WALL CARBON NANOTUBES--

### In the Abstract

Please amend the abstract by replacing the present abstract with the following:

--This invention relates generally to forming a patterned array of single-wall carbon nanotubes (SWNT). In one embodiment, a nanoscale array of microwells is provided on a substrate; a metal catalyst is deposited in each microwells; and a stream of hydrocarbon or CO feedstock gas is directed at the substrate under conditions that effect growth of single-wall carbon nanotubes from each microwell.--

### In the Specification

Please amend the specification as noted on page 5, paragraph 11 of the Request by inserting before the first line of the specification the following:

### --RELATED APPLICATIONS

This application is a division of co-pending prior U.S. patent application Serial No. 09/380,545, filed on September 3, 1999, entitled "CARBON FIBERS FORMED FROM SINGLE-WALL CARBON NANOTUBES," which is the 35 U.S.C. § 371 national application of International Application Number PCT/US98/04513 filed on March 6, 1998, which designated the United States, claiming priority to: provisional U.S. patent application Serial Number 60/067,325, filed on December 5, 1997; provisional U.S. patent application Serial Number 60/064,531, filed on November 5, 1997; provisional U.S. patent application Serial Number 60/063,675, filed on October 29, 1997; provisional U.S. patent application Serial

IN RE: APPLICATION OF SMALLEY ET AL.  
PRELIMINARY AMENDMENT ACCOMPANYING REQUEST FOR FILING DIVISIONAL APPLICATION UNDER  
37 C.F.R. § 1.53(b)

Number 60/055,037, filed on August 8, 1997; provisional U.S. patent application Serial Number 60/047,854, filed on May 29, 1997; and provisional U.S. patent application Serial Number 60/040,152, filed on March 7, 1997. Each of the foregoing applications is commonly assigned to the assignee of the present invention and is hereby incorporated herein by reference in its entirety.

This application discloses subject matter related to the subject matter of U.S. patent application Serial Number 10/000,746, filed on November 30, 2001 in the name of Daniel T. Colbert et al., entitled "MACROSCOPICALLY MANIPULABLE NANOSCALE DEVICES MADE FROM NANOTUBE ASSEMBLIES," which application is commonly assigned to the assignee of the present invention.--

#### In the Claims

Please amend the claims as follows:

A. Please cancel claims 1-33 and 36-162 without prejudice or disclaimer to the subject matter thereof.

B. Please add the following new claims 163-170:

163. (New) A method for forming a macroscopic molecular array of single-wall carbon nanotubes comprising:

- (a) providing an array of a plurality of metal catalysts on a substrate;
- (b) directing a stream of carbon containing feedstock gas at the substrate under conditions for growing single-wall carbon nanotubes from at least one of the plurality of the metal catalysts.

164. (New) The method of claim 163, wherein the carbon containing feedstock gas comprises a gas selected from the group consisting of hydrocarbons, CO, and combinations thereof.

165. (New) The method of claim 163 wherein the array of the plurality of metal catalysts are formed by depositing catalysts in an array of microwells on the substrate.

IN RE: APPLICATION OF SMALLEY ET AL.  
PRELIMINARY AMENDMENT ACCOMPANYING REQUEST FOR FILING DIVISIONAL APPLICATION UNDER  
37 C.F.R. § 1.53(b)

166. (New) The method of claim 165 further comprising producing the substrate with an array of the microwells.

167. (New) The method of claim 163 further comprising applying an electric field to the substrate.

168. (New) The methods of claim 163 wherein the substrate comprises a substance selected from the groups consisting of silicon, silicon dioxide and combinations thereof.

169. (New) The method of claim 165 wherein the catalysts are in the form of pre-formed nanoparticles.

170. (New) The method of claim 165 wherein the substrate comprises at least about one million microwells.

### REMARKS

A. *Status of the Application.* On September 3, 1999, Applicant filed the parent patent application, U.S. patent application Serial No. 09/380,545, which included originally filed claims 1-162. In an Office Action, dated June 20, 2000, ("the Office Action") the Examiner subjected the claims to a restriction requirement. According to the Office Action, the parent patent application's claims were directed to eleven (11) distinct inventions. Applicant elected the invention of Group VIII in the parent patent application. The present divisional application is directed to the invention of Group IV, which were identified as the invention claimed by originally filed claims 34-35.

Accordingly, originally filed claims 34-35 remain in the application, and the other originally filed claims -- claims 1-33 and 36-162 -- are cancelled herein without prejudice or disclaimer to the subject matter thereof. Additionally, claims 163-170 have also been added herein. No new matter is added by the addition of these claims.

### CONCLUSION

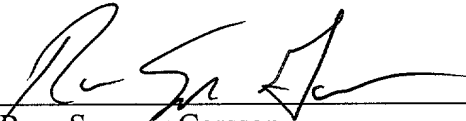
It is believed that each of the claims now pending in the present application recites elements neither taught nor suggested by the prior art. Further, it is believed that the application

IN RE: APPLICATION OF SMALLEY ET AL.  
PRELIMINARY AMENDMENT ACCOMPANYING REQUEST FOR FILING DIVISIONAL APPLICATION UNDER  
37 C.F.R. § 1.53(b)

as a whole is in proper form and condition for allowance. If the Examiner believes that the application may be placed in even better condition for allowance, he or she is invited to contact the undersigned at the telephone number noted below. Alternatively, or in addition, if the Examiner believes that an Examiner interview would be beneficial, the Examiner is invited to note that the undersigned has ready access to the videoconferencing facilities of the South Central Intellectual Property Partnership at Rice University in Houston, Texas. The inventors and the undersigned would welcome the opportunity to use those facilities to clarify any issues deemed to remain unresolved.

Respectfully submitted,

Date: December 28, 2001

  
\_\_\_\_\_  
Ross Spencer Garsson  
Reg. No. 38,150  
Winstead Sechrest & Minick P.C.  
100 Congress Avenue  
Suite 800  
Austin, Texas 78701  
(512) 370-2870 (voice)  
(512) 370-2850 (fax)

ATTORNEYS FOR ASSIGNEE

AUSTIN\_1\180573\1  
12/28/2001 - 11321-P012USD4